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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/528,964	03/20/2000	Donald Bernard Bivens	FL-1065	6749

7590 05/22/2003

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EXAMINER

HARDEE, JOHN R

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 05/22/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/528,964

Applicant(s)

BIVENS ET AL.

Examiner

John R Hardee

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-- The MAILING DATE of this communication appears in the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 9-25480. At [0041] the reference discloses refrigerant compositions consisting of 5% of isobutane, 22-23% of R-125, 17-26% of R-32 and 47-55% of R-134a. The vapor pressure properties are inherent properties of the disclosed compositions. Condensing and evaporating of the compositions may be reasonably inferred, as their disclosed utility is in refrigeration, which is a cycle of condensation and evaporation. As all of the limits of the claims have been met, this disclosure constitutes anticipation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-25480. The claims are obvious because they are anticipated. Anticipation is the epitome of obviousness.

7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/03473 A1. The reference discloses compositions for use in heat transfer devices, such as refrigerators and air conditioners (abstract). At lines 3+ of p. 5, the reference discloses that the compositions may comprise, most preferably, 10-25% by weight of R-32; 35-75% of R-125; 1-7% of a hydrocarbon and 13-45% of R-134a. Suitable

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hydrocarbons preferably include one or more of butane, isobutane, pentane and isopentane (p. 4, lines 4-6). While pentane is especially preferred, the teachings of a reference are not limited to what is exemplified or preferred. This reference differs from the claimed subject matter in that it does not disclose a composition which reads on applicant's claims with sufficient specificity to constitute anticipation.

It would have been obvious at the time the invention was made to make such a composition, because this reference teaches that all of the ingredients recited by applicants in amounts which meet applicants' percentage limitations are suitable for inclusion in a refrigerant composition. The person of ordinary skill in the refrigeration art would expect the recited compositions to have properties similar to those compositions which are exemplified, absent a showing to the contrary. The vapor pressure properties are inherent properties of the disclosed compositions. Applicants' recited vapor pressure limitations may be met by following the teaching of the reference. Condensing and evaporating of the compositions may be reasonably inferred, as their disclosed utility is in refrigeration, which is a cycle of condensation and evaporation.

In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed Cir. 1990).

8. Any prior art made of record and not relied upon is of interest and is considered pertinent to applicant's disclosure.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose telephone number is (703) 305-5599. The examiner can normally be reached on Monday through Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Dr. Yogendra Gupta, may be reached at (703) 308-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'J. Hardee', with a stylized, cursive script.

John R. Hardee
Primary Examiner
May 20, 2003